

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An article comprising a substrate, a smooth highly reflective layer applied to said substrate and having a reflectivity of at least 60 gloss units, and a raised print image on said reflective layer, at least part of said raised print image having a height of at least 10 microns, said raised print image formed by a transparent or translucent ink having properties which render low chroma and low brightness values such that the raised print image is transparent or translucent while causing scattering of the light reflectance and transmittance such that the ink reflects light in a partially specular manner, wherein the raised print image is visible at angles within a window of high reflection and substantially non-detectable outside the window.

2. (Previously presented) An article as claimed in claim 1, wherein the ink has a haze value in the range of about 60 to 98, as measured on an XL 211 Hazegard haze measuring instrument and an ink thickness of about 15 microns.

3. (Previously presented) An article as claimed in claim 2, wherein the haze value is about 85 to 95.

4. (Previously presented) An article as claimed in claim 1, wherein the smooth highly reflective layer is a print layer.

5. (Previously presented) An article as claimed in claim 4, wherein the smooth highly reflective layer is applied to a specific region of the substrate and a remaining portion of the substrate has printing applied by the same process as the smooth highly reflective layer.

6. (Canceled)

7. (Previously presented) An article as claimed in claim 1, wherein the reflective layer is about 3 microns thick.

8. (Currently amended) An article as claimed in ~~any one of claims 1-5 or 7~~ claim 1, wherein the smooth highly reflective layer comprises a reflective foil applied to the substrate.

9. (Previously presented) An article as claimed in claim 4, wherein the substrate is a smooth surfaced polymer film.

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CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

10. (Canceled)

11. (Currently amended) A method of producing an article comprising the steps of applying a smooth highly reflective layer to a substrate, said reflective layer having a reflectivity of at least 60 gloss units, and printing a raised printed image on the reflective layer, at least part of said raised printed image having a height of at least 10 μm and being printed using a transparent or translucent ink having properties which render it low chroma and low brightness values such that the raised printed image is substantially transparent or translucent while causing scattering of the light reflectance and transmittance such that the ink reflects light in at least a partially specular manner, wherein the raised printed image is visible at angles within a window of high reflection and substantially non-detectable outside the window.

12. (Previously presented) The method of claim 11, wherein the ink has a haze value of about 60 to 98 as measured on an XL 211 Hazegard haze measuring instrument and an ink thickness of about 15 microns.

13. (Previously presented) An article as claimed in claim 8, wherein the article is selected from the group consisting of passports, bonds, banknotes, security passes and security devices.

14. (Currently amended) An article as claimed in ~~any one of claims 1-5 or 9~~ claim 1, wherein the article is selected from the group consisting of passports, bonds, banknotes, security passes and security devices.

15. (Previously presented) The method of claim 12, wherein the haze value is about 85 to 95.

16. (Previously presented) The method of claim 11, wherein the smooth highly reflective layer is applied by a printing process.

17. (Previously presented) The method of claim 16, wherein the smooth highly reflective layer is applied to a specific region of the substrate and the method further comprises printing a remaining portion of the substrate by the same printing process as used to print the smooth highly reflective layer.

18. (Previously presented) The method of claim 16, wherein the reflective layer is 3 microns thick.

19. (Previously presented) The method of claim 11, wherein the smooth highly reflective layer is reflective foil applied to the substrate.

20. (Previously presented) The method of claim 16, wherein the substrate is a smooth surfaced polymer film.

21. (Previously presented) The method of claim 11, wherein the raised printed image is a pattern of raised dots.

22. (Previously presented) The method of claim 21, wherein the pattern of raised dots is a regular array of spaced dots.

23. (Previously presented) The method of claim 22, wherein the reflective substrate bears non-reflective indicia.

24. (Previously presented) The method of claim 23, wherein the ratio of the pitch of the dots to the pitch of the indicia is in the range of about 1:5 to about 1:2.

25. (Previously presented) The method of claim 11, wherein the raised printed image is a pattern of lines.

26. (Previously presented) The method of claim 25, wherein the pattern of lines is a series of regularly spaced substantially parallel lines.

27. (Previously presented) The method of claim 26, wherein the reflective substrate bears non-reflective indicia.

28. (Previously presented) The method of claim 27, wherein the ratio of the pitch of the lines to the pitch of the indicia is in the range of about 1:5 to about 1:2.

29. (Currently amended) The method claimed in ~~any one of claims 11, 12, or 16~~ claim 11, wherein the article is selected from the group consisting of passports, bonds, banknotes, security passes and security devices.

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30. (Currently amended) An article comprising a substrate, a smooth highly reflective layer applied to said substrate and having a reflectivity of at least 60 gloss units, a non-reflective image on the reflective layer, and a raised print image on said reflective layer, at least part of said raised print image having a height of at least 10 microns, said raised print image formed by a transparent or translucent ink having properties which render low chroma and low brightness values such that the raised print image is transparent or translucent while causing scattering of the light reflectance and transmittance such that the ink reflects light in a partially specular manner wherein the raised print image is visible at angles within a window of high reflection and substantially nondetectable outside the window.

31. (Previously presented) An article as claimed in claim 30, wherein the translucent ink has a haze value in the range of about 60 to 98, as measured on an XL 211 Hazegard haze measuring instrument and an ink thickness of about 15 microns.

32. (Previously presented) An article as claimed in claim 31, wherein the haze value is about 85 to 95.

33. (Previously presented) An article as claimed in claim 30, wherein the smooth highly reflective layer is a print layer.

34. (Previously presented) An article as claimed in claim 30, wherein the raised print image is a pattern of dots.

35. (Previously presented) An article as claimed in claim 34 wherein the pattern of dots is a regular array of spaced dots.

36. (Previously presented) An article as claimed in claim 35 wherein the non-reflective image comprises non-reflective indicia.

37. (Previously presented) An article as claimed in claim 36 wherein the ratio of the pitch of the dots to the pitch of the indicia is in the range of about 1:5 to about 1:2.

38. (Previously presented) An article as claimed in claim 30 wherein the raised print image is a pattern of lines.

39. (Previously presented) An article as claimed in claim 38 wherein the pattern of lines is a series of regularly spaced substantially parallel lines.

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40. (Previously presented) An article as claimed in claim 39 wherein the non-reflective image comprises non-reflective indicia.

41. (Previously presented) An article as claimed in claim 40 wherein the ratio of the pitch of the lines to the pitch of the indicia is in the range of about 1:5 to about 1:2.

42. (Currently amended) An article as claimed in ~~any one of claims 30-41~~ claim 40 wherein the article is selected from the group consisting of passports, bonds, banknotes, security passes, and security devices.

43. (New) An article as claimed in claim 1, wherein the transparent or translucent ink contains less than 2% pigment by weight.

44. (New) The method of claim 11, wherein the transparent or translucent ink contains less than 2% pigment by weight.

45. (New) An article as claimed in claim 30, wherein the transparent or translucent ink contains less than 2% pigment by weight.

46. (New) An article comprising a substrate, a smooth highly reflective layer applied to said substrate and having a reflectivity of at least 60 gloss units, and a raised print image on said reflective layer, at least part of said raised print image having a height of at least 10 microns, said raised print image formed by a transparent or translucent ink having properties which render the raised print image transparent or translucent while causing scattering of the light reflectance and transmittance such that the ink reflects light in a partially specular manner, wherein the raised print image is visible at angles within a window of high reflection and substantially non-detectable outside the window, wherein the transparent or translucent ink contains less than 2% pigment by weight.

47. (New) An article as claimed in claim 46, wherein the ink has a haze value in the range of about 60 to 98, as measured on an XL 211 Hazegard haze measuring instrument and an ink thickness of about 15 microns.

48. (New) An article as claimed in claim 47 wherein the haze value is about 85 to 95.

49. (New) An article as claimed in claim 46 wherein the smooth highly reflective layer is a print layer.

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50. (New) An article as claimed in claim 49, wherein the smooth highly reflective layer is applied to a specific region of the substrate and a remaining portion of the substrate has printing applied by the same process as the smooth highly reflective layer.

51. (New) An article as claimed in claim 46, wherein the reflective layer is about 3 microns thick.

52. (New) An article as claimed in claim 46, wherein the smooth highly reflective layer comprises a reflective foil applied to the substrate.

53. (New) An article as claimed in claim 46 wherein the substrate is a smooth surfaced polymer film.

54. (New) An article as claimed in claim 46, wherein the transparent or translucent ink contains less than 2% pigment by weight.

55. (New) An article as claimed in claim 46, wherein the raised printed image is a pattern of raised dots.

56. (New) An article as claimed in claim 55, wherein the pattern of raised dots is a regular array of spaced dots.

57. (New) An article as claimed in claim 56, wherein the reflective substrate bears non-reflective indicia.

58. (New) An article as claimed in claim 57, wherein the ratio of the pitch of the dots to the pitch of the indicia is in the range of about 1:5 to about 1:2.

59. (New) An article as claimed in claim 46, wherein the raised printed image is a pattern of lines.

60. (New) An article as claimed in claim 59, wherein the pattern of lines is a series of regularly spaced substantially parallel lines.

61. (New) An article as claimed in claim 60 wherein the reflective substrate bears non-reflective indicia.

62. (New) An article as claimed in claim 61, wherein the ratio of the pitch of the lines to the pitch of the indicia is in the range of about 1:5 to about 1:2.

63. (New) An article as claimed in claim 46, wherein the article is selected from, the group consisting of passports, bonds, banknotes, security passes and security devices.

64. (New) An article comprising a substrate, a smooth highly reflective layer applied to said substrate and having a reflectivity of at least 60 gloss units, and a raised print image on said reflective layer, at least part of said raised print image having a height of at least 10 microns, said raised print image formed by transparent or translucent ink having properties which render the raised print image transparent or translucent while causing scattering of the light reflectance and transmittance such that the ink reflects light in a partially specular manner, wherein the raised print image is visible at angles within a window of high reflection and substantially non-detectable outside the window, wherein the ink has a haze value in the range of about 60 to 98.

65. (New) An article as claimed in claim 64, wherein the ink has an ink thickness of about 15 microns.

66. (New) An article as claimed in claim 64, wherein the haze value is about 85-95 as measured on an XL 211 Hazegard haze measuring instrument.

67. (New) An article as claimed in claim 64, wherein the smooth highly reflective layer is a print layer.

68. (New) An article as claimed in claim 67, wherein the smooth highly reflective layer is applied to a specific region of the substrate and a remaining portion of the substrate has printing applied by the same process as the smooth highly reflective layer.

69. (New) An article as claimed in claim 64, wherein the reflective layer is about 3 microns thick.

70. (New) An article as claimed in claim 64, wherein the smooth highly reflective layer comprises a reflective foil applied to the substrate.

71. (New) An article as claimed in claim 1, wherein the substrate is a smooth surfaced polymer film.

72. (New) An article as claimed in claim 64 wherein the ink contains less than 2% pigment by weight.

73. (New) An article as claimed in claim 64, wherein the smooth highly reflective layer is a print layer.

74. (New) An article as claimed in claim 65, wherein the raised print image is a pattern of dots.

75. (New) An article as claimed in claim 66, wherein the pattern of dots is a regular array of spaced dots.

76. (New) An article as claimed in claim 67, wherein the reflective layer bears non-reflective indicia.

77. (New) An article as claimed in claim 76, wherein the ratio of the pitch of the dots to the pitch of the indicia is in the range of about 1:5 to about 1:2.

78. (New) An article as claimed in claim 64, wherein the raised print image is a pattern of lines.

79. (New) An article as claimed in claim 78, wherein the pattern of lines is a series of regularly spaced substantially parallel lines.

80. (New) An article as claimed in claim 79, wherein the reflective layer bears non-reflective indicia.

81. (New) An article as claimed in claim 80, wherein the ratio of the pitch of the lines to the pitch of the indicia is in the range of about 1:5 to about 1:2.

82. (New) An article as claimed in claim 64, wherein the article is selected from the group consisting of passports, bonds, banknotes, security passes, and security devices.